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ATTORNEYS

1764

December 16, 2003

Attorney-Client Communication
Via Facsimile

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37808.0006

1700

Technology Center 1700
U.S. Patent and Trademark Office
Commissioner of Patents
Washington, D.C. 20231

041

Re: U.S. Patent Application Serial No. 09/485,675 (OGINO et al.)
Title: Moisture-Absorbent/Releasable Heat-Generating Intermediate Material, Method for Producing the Same, and Moisture-absorbent/Releasable Heat-Generating Heat-Retaining Article
Our Ref.: 37808-0006

Dear Sir: 1764 Wachtel

As discussed with Examiner Wachtel on December 16, 2003, please enter the attached declaration into the file for this case.

Applicants request consideration of the attached declaration. If a teleconference would be helpful, the Examiner is requested to call applicants' attorney, Marvin Motsenbocker at 202-912-2195.

Sincerely

Marvin Motsenbocker

Enclosures

MAM:hfj

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No. 37808-0006

In re Patent Application of:

Takeshi OGINO, et al.

Confirmation No. 9758

Serial No. 09/485,675

Group Art Unit: 1771

Filed: February 24, 2000

Examiner: Alexis A. Wachtel

Title: MOISTURE-ABSORBENT/RELEASABLE HEAT-GENERATING INTERMEDIATE MATERIAL, METHOD FOR PRODUCING THE SAME AND MOISTURE-ABSORBENT/RELEASABLE HEAT-GENERATING HEAT-RETAINING ARTICLE

Declaration under 37 C.F.R. § 1.132

I, Mr. Takeshi Ogino, declare:

1. I am a named inventor of the subject matter claimed in United States Patent Application Serial No.09/485,675 ("the Application").

2. I have received a BS in Engineering and Design (dyeing chemistry) from Kyoto Institute of Technology in Japan, and have worked in the field of textiles for 22 years. My curriculum vitae is attached as Appendix A.

3. I understand that, in one aspect, the claimed invention in the Application covers a new manufacturing process that accommodates providing a first moisture-absorbing heat generating fiber that comprises a crosslinked acrylic fiber prepared by crosslinking with a nitrogen containing compound and by hydrolysis of uncrosslinked residues; providing a second heat retaining fiber or feather; drying the first fiber to an inherent minimum moisture content; and homogeneously blending the first fiber with the second fiber or feather in a weight ratio of between 1 to 9 and 4 to 6 while the first fiber is at its inherent minimum moisture content.

4. I also understand that, in another aspect, the claimed invention in the Application is directed to a moisture-absorbent/releasable heat generating material for use in

an article of clothing, prepared by a manufacturing process of: providing a first moisture-absorbing heat generating fiber that comprises a crosslinked acrylic fiber prepared by crosslinking with a nitrogen containing compound and by hydrolysis of uncrosslinked residues; providing a second heat retaining fiber or feather; allowing the first fiber to absorb moisture; and homogeneously blending the wet first fiber with the second fiber or feather in a weight ratio of between 1 to 9 and 4 to 6 during a wet process.

5. I have reviewed the relevant provisions of the Office Actions dated March 6, 2002, and December 5 2002; and I understand that the Examiner asserts that the claimed invention is made obvious by GB2000440A in view of JP 06294006A and US 6,112,328 to Spector.

6. I further understand that the basis for the Examiner's position is his assertion that: (i) it would have been obvious "to have replaced the the fiberfill in Spector's fabric with the homogeneously blended fibers (polyacrylonitrile fibers) and heat retaining fibers (feathers) of GB2000440A which would be used as an intermediate material to be placed in between the inner and outer skins of the fabric structure suggested by Spector" and that (ii) "[t]he method limitations of drying or humidifying said fibers are not given weight in the article claims since the final product will still be an article with a filler material disposed within it." (December 5, 2002 office action page 5 middle to bottom).

7. In my professional opinion, however, it would not have been obvious to manufacture an article of clothing by replacing "the fiberfill of Spector's fabric with the homogeneously blended fibers (polyacrylonitrile fibers) and heat retaining fibers," primarily because of the extreme difficultly in manufacturing such article. In particular, under regular textile manufacturing conditions, the polyacrylonitrile fibers become balled masses that cannot mix easily. This new type of fiber is not handled properly by regular textile machinery because of the fiber's unusual properties. In fact, all established manufacturing processes fail to blend and disperse the moisture absorbent/releasable heat-generating fiber in the

second fiber homogeneously. The resulting blend is lumpy and performs poorly as a garment material.

8. In my professional opinion, the claimed product cannot be made by any other known process. In fact, either drying the special fiber to an inherent minimum moisture content (claims 36-45) or allowing the special fiber to become wet (claims 46-54) during textile manufacture and prior to blending in the prescribed ratio, is necessary to blend the fiber in an satisfactory manner.

9. In my professional opinion, the special drying of this moisture absorbent/releasable fiber to an inherent minimum moisture content or allowing the fiber to become wet is a process step that does not occur in textile manufacture. This claim element is not found in any of the references cited.

10. Thus, a skilled worker, would expect and indeed would discover that merely combining the moisture absorbent/releasable fiber with a second heat retaining fiber or feather in a textile manufacturing facility does not work.

11. In other words, there is no previously known textile manufacturing process that could handle the special requirements of the moisture absorbent/releasable fiber. The claimed methods allow a distinct type of blend to be produced and no other textile process can produce the blended product.

12. All statements made herein of my knowledge are true and all statements made on information and belief are believed to be true; and further, these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001 and that such willful false statements may jeopardize the validity of the application or any document or any registration resulting therefrom.

Date: December 9, 2003

T. Ogino

Takeshi Ogino

Appendix A: Curriculum Vitae

Name:

Takeshi OGINO

Degree:

1982 BS in Engineering and Design (dyeing chemistry) conferred by Kyoto Institute of Technology in Japan

Employment:

1982-present MIZUNO CORPORATION
engaged in development of sportswear materials and designs

Membership:

The Institution of Professional Engineers, Japan (Textile division)

Publications:

"Development of a moisture-absorbing/releasing, heat-generating wear 'Breath Thermo'," *Reviews and News*, 57 (December 2001): 320-323, published by the Society of Fiber Science and Technology, Japan.

"Heat-generating fiber," *Textile Handbook,* 3rd edition, Tokyo: Maruzen Company, Limited. (to be published in 2004)

Public appearances (Lectures):

October 16, 1998 "Cold weather wear adopted in the Winter Olympics," at the 16th symposium on clothing comfort held by the Japan Research Association for Textile End-Uses

March 30, 1999 "Sportswear and human action," at Technical workshop held by Research Institute of Human Engineering for Quality Life

June 25, 1999 "Cold weather wear adopted in the Winter Olympics," at the 20th anniversary seminar held by Japan Society of Thermophysical Properties

August 27, 1999 "Cold weather wear adopted in the Winter Olympics," at the 30th summer seminar held by the Society of Fiber Science and Technology, Japan

April 18, 2003 "Development and marketing of a moisture-absorbing, heat-generating material," at the product introduction lecture presentation on "clothing comfort" held by the Textile Machinery Society of Japan

July 18, 2003 "Development and marketing of a moisture-absorbing, heat-generating material 'Breath Thermo'," at the 24th open technical lecture held by Japan Textile Consultants Center

Interviews:

November 6, 1997	The Sankei Shimbun, morning edition http://www.sankei.co.jp/olympic/nagano/houtei/houtei17.html
November 2002	"Ohmura's Column," an internet column by a sports journalist Yoshikazu Ohmura http://www.mizuno.co.jp/column/vol3.html
June 3, 2003	The Yomiuri Shimbun Osaka, evening edition http://osaka.yomiuri.co.jp/new_feature/wazaari/2003/030603.htm

Prize:

May 2001	Technology Award from the Society of Fiber Science and Technology, Japan, for development of a moisture-releasing/absorbing, heat-generating material "Breath Thermo"